NORLITE, LLC

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June 4, 2013

Ms. Nancy Baker
Deputy Regional Permit Administrator
New York State Department of Environmental Conservation
Region 4
1130 North Westcott Road
Schenectady, NY 12306-2014 RETURN RECEIPT REQUESTED VIA EMAIL

Mr. Kenneth Eng
Air Compliance Branch
United States Environmental Protection Agency
Region 2
290 Broadway
New York, NY 10007-1866 RETURN RECEIPT REQUESTED VIA EMAIL

Re: Norlite Corporation-MACT Excessive Exceedance Report
Kiln 1: 04/09/13- 06/04/13
Kiln 2: 04/09/13- 06/04/13

Dear Sirs:

In accordance with 40 CFR 63.1206(c)(3)(vi), the Norlite, LLC (Norlite) is submitting an "Excessive Exceedance Report" for the timeframe of 04/09/13 thru 06/04/13. The attached document explains each of the "malfunctions" for Kiln One and Two.

The results of the investigation concluded a majority of the waste feed cutoffs were a result of the span limit associated with the Scrubber pH monitor. The I&E Department conducted many hours of troubleshooting to resolve these span cutoffs. The length of time to correct the issue was aggravated by the intermittent nature of the problem occurring. Ultimately it was determined the pH probe signal wire was damage and causing a fault. The signal wire was replaced and guarded against future damage. Additionally, Norlite determined a bad lot of pH probes were received by its vendor. A new lot was opened and replaced all the previous pH probes. Norlite will continue to evaluate each exceedance in order to implement the proper corrective action to further decrease the amount of MACT exceedances.

All of the malfunctions that occurred were consistent with our Startup, Shutdown and Malfunction Plan (SSMP). As approved by the NYSDEC on February 6, 2006, these reports are being sent electronically.

DCL: 2410

Norlite, LLC

Should you have any questions regarding this letter, please contact me at (518) 235-0401 or email at: tvanvranken@norlitecorp.com.

Sincerely,

Thomas Van Vranken

Thomas Van Vranken
Environmental Manager

Attachments

ecc: Don Spencer, NYDEC – R4 w/attachments
James Lansing, NYSDEC – CO w/attachments
Joeseph Hadersbeck, NYSDEC – R4w/attachments
Jim Quinn, NYSDEC – R4 w/attachments
Tita LaGrimas – Tradebe

DCL: 2410

NORLITE, LLC
MACT EXCEEDANCE REPORT - KILN 1
04/09/13 - 06/04/13

Start Date	Start Time	End Date	End Time	Downtime	#	Event	Cause	Parameter	Limit	Corrective Action
4/21/2013	1:59:59	4/21/2013	2:01:10	0:01:11	77	Malfunction	Instantaneous Upper Instrument Setpoint Was Reached for Baghouse Inlet Temp. Span Due to A Bad Wire Connection On the Thermocouple	Baghouse Inlet Temp.	Span	I&E Replaced the Thermocouple on 04/22/13
4/21/2013	3:58:48	4/21/2013	3:59:30	0:00:42	78	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Scrubber pH Span Due to the pH Probe Being Coated With Soda Ash Solids	Scrubber pH	Span	I & E Cleaned the pH Probe
4/22/2013	1:09:19	4/22/2013	1:10:29	0:01:10	79	Malfunction	Instantaneous Upper Instrument Setpoint Was Reached for Baghouse Inlet Temp. Span Due to A Bad Wire Connection On the Thermocouple	Baghouse Inlet Temp.	Span	I&E Replaced the Thermocouple on 04/22/13
4/23/2013	19:35:08	4/23/2013	19:40:02	0:04:54	80	Malfunction	Instantaneous Upper Instrument Setpoint Was Reached for Stack Gas Span Due to Soda Ash Buildup On the Probe	Stack Gas Flow Rate	Span	I & E Cleaned Probe
4/25/2013	22:06:28	4/25/2013	22:07:19	0:00:51	81	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Lime Flow Span	Lime Flow	Span	Adjusted Lime Flow
5/16/2013	8:23:52	5/16/2013	8:24:21	0:00:29	82	Malfunction	The pH Sample Loop Was Partially Plugged Which Caused a Decrease in Scrubber Water Flow. The Reduced Flow Caused the pH Probe to Fault to a High pH Reading	Scrubber pH	Span	The WWTP Mechanic Cleared the Sample Loop to Reestablish Proper Flow of Water
5/16/2013	11:09:08	5/16/2013	11:09:27	0:00:19	83	Malfunction	The pH Sample Loop Was Partially Plugged Which Caused a Decrease in Scrubber Water Flow. The Reduced Flow Caused the pH Probe to Fault to a High pH Reading	Scrubber pH	Span	The WWTP Mechanic Cleared the Sample Loop to Reestablish Proper Flow of Water
5/17/2013	11:01:35	5/17/2013	11:03:38	0:02:03	84	Malfunction	I & E Conducted Troubleshooting to Determine the Cause of the Fault. The First Step in the Troubleshooting Process Was to Recalibrate the Unit	Scrubber pH	Span	The pH Probe Was Recalibrated As Part of Troubleshooting
5/17/2013	11:49:57	5/17/2013	11:51:08	0:01:11	85	Malfunction	I & E Conducted Troubleshooting to Determine the Cause of the Fault. The First Step in the Troubleshooting Process Was to Recalibrate the Unit	Scrubber pH	Span	The pH Probe Was Recalibrated As Part of Troubleshooting
5/17/2013	11:57:13	5/17/2013	11:59:08	0:01:55	86	Malfunction	I & E Conducted Troubleshooting to Determine the Cause of the Fault. The Second Step in the Troubleshooting Process Was to Replace the pH Probe	Scrubber pH	Span	The pH Probe Was Replaced as Part of Troubleshooting
5/17/2013	21:09:30	5/17/2013	21:10:06	0:00:36	87	Malfunction	I & E Conducted Troubleshooting to Determine the Cause of the Fault. The Second Step in the Troubleshooting Process Was to Replace the pH Probe	Scrubber pH	Span	The pH Probe Was Replaced as Part of Troubleshooting
5/17/2013	21:26:05	5/17/2013	21:26:39	0:00:34	88	Malfunction	I & E Conducted Troubleshooting to Determine the Cause of the Fault. The Second Step in the Troubleshooting Process Was to Replace the pH Probe	Scrubber pH	Span	The pH Probe Was Replaced as Part of Troubleshooting
5/18/2013	1:15:56	5/18/2013	1:16:34	0:00:38	89	Malfunction	I & E Conducted Troubleshooting to Determine the Cause of the Fault. The Third Step In the Troubleshooting Process Was to Inspect the System Further From the pH Probe Itself. A Kink Was Found in the pH Probe Signal Wire.	Scrubber pH	Span	The pH Probe Signal Wire Was Replaced and Guarded As Part of Troubleshooting

NORLITE, LLC
MACT EXCEEDANCE REPORT - KILN 1
04/09/13 - 06/04/13

Start Date	Start Time	End Date	End Time	Downtime	#	Event	Cause	Parameter	Limit	Corrective Action
5/18/2013	1:19:40	5/18/2013	1:20:17	0:00:37	90	Malfunction	I & E Conducted Troubleshooting to Determine the Cause of the Fault. The Third Step In the Troubleshooting Process Was to Inspect the System Further From the pH Probe Itself. A Kink Was Found in the pH Probe Signal Wire.	Scrubber pH	Span	The pH Probe Signal Wire Was Replaced and Guarded As Part of Troubleshooting
5/18/2013	1:21:34	5/18/2013	1:22:12	0:00:38	91	Malfunction	I & E Conducted Troubleshooting to Determine the Cause of the Fault. The Third Step In the Troubleshooting Process Was to Inspect the System Further From the pH Probe Itself. A Kink Was Found in the pH Probe Signal Wire.	Scrubber pH	Span	The pH Probe Signal Wire Was Replaced and Guarded As Part of Troubleshooting
5/18/2013	1:23:06	5/18/2013	1:27:21	0:04:15	92	Malfunction	I & E Conducted Troubleshooting to Determine the Cause of the Fault. The Third Step In the Troubleshooting Process Was to Inspect the System Further From the pH Probe Itself. A Kink Was Found in the pH Probe Signal Wire.	Scrubber pH	Span	The pH Probe Signal Wire Was Replaced and Guarded As Part of Troubleshooting
5/18/2013	1:29:25	5/18/2013	1:29:41	0:00:16	93	Malfunction	I & E Conducted Troubleshooting to Determine the Cause of the Fault. The Third Step In the Troubleshooting Process Was to Inspect the System Further From the pH Probe Itself. A Kink Was Found in the pH Probe Signal Wire.	Scrubber pH	Span	The pH Probe Signal Wire Was Replaced and Guarded As Part of Troubleshooting
5/18/2013	22:26:35	5/18/2013	22:27:21	0:00:46	94	Malfunction	I & E Conducted Troubleshooting to Determine the Cause of the Fault and Found the pH Probe Was Out of Calibration	Scrubber pH	Span	The pH Probe Was Recalibrated As Part of Troubleshooting
5/18/2013	23:18:28	5/18/2013	23:18:48	0:00:20	95	Malfunction	I & E Conducted Troubleshooting to Determine the Cause of the Fault and Found the pH Probe Was Out of Calibration	Scrubber pH	Span	The pH Probe Was Recalibrated As Part of Troubleshooting
5/19/2013	4:28:56	5/19/2013	4:29:18	0:00:22	96	Malfunction	I&E Conducted Troubleshooting to Determine the Cause and Found a Lot of pH Probes to be Bad	Scrubber pH	Span	I&E Opened A Different Lot of pH Probes and Replaced the Faulty Probes
5/19/2013	13:46:56	5/19/2013	13:47:14	0:00:18	97	Malfunction	I&E Conducted Troubleshooting to Determine the Cause and Found a Lot of pH Probes to be Bad	Scrubber pH	Span	I&E Opened A Different Lot of pH Probes and Replaced the Faulty Probes
5/21/2013	21:28:05	5/21/2013	21:28:24	0:00:19	98	Malfunction	Instantaneous Upper Instrument Setpoint Was Reached for LGF Flow Span Due to the Kiln Operator Accidentally Hitting A Valve Which Caused the LGF Flow to Increase	LGF Flow	Span	The Kiln Operator Reduced the LGF Flow Rate
5/26/2013	22:21:18	5/26/2013	22:23:18	0:02:00	99	Malfunction	The pH Sample Loop Was Partially Plugged Which Caused a Decrease in Scrubber Water Flow. The Reduced Flow Caused the pH Probe to Fault to a High pH Reading	Scrubber pH		The WWTP Mechanic Cleared the Sample Loop to Reestablish Proper Flow of Water
5/27/2013	2:13:46	5/27/2013	2:14:48	0:01:02	100	Malfunction	The pH Sample Loop Was Partially Plugged Which Caused a Decrease in Scrubber Water Flow. The Reduced Flow Caused the pH Probe to Fault to a High pH Reading	Scrubber pH		The WWTP Mechanic Cleared the Sample Loop to Reestablish Proper Flow of Water

NORLITE, LLC
MACT EXCEEDANCE REPORT - KILN 1
04/09/13 - 06/04/13

Start Date	Start Time	End Date	End Time	Downtime	#	Event	Cause	Parameter	Limit	Corrective Action
5/31/2013	2:00:20	5/31/2013	2:02:07	0:01:47	101	Malfunction	After A Power Outage, the Kiln Developed A Low Kiln System Draft Which Affected the Venturi Differential Pressure in the Scrubber	Front Kiln Pressure, 1 Second Delay	Opl	After Repeated Attempts to Adjust the Draft, the Kiln Was Shutdown for Inspection on 06/02/13
5/31/2013	4:23:52	5/31/2013	4:25:27	0:01:35	102	Malfunction	After A Power Outage, the Kiln Developed A Low Kiln System Draft Which Affected the Frontend Differential Kiln Pressure	Venturi D.P.	Span	After Repeated Attempts to Adjust the Draft, the Kiln Was Shutdown for Inspection on 06/02/14

NORLITE, LLC
MACT EXCEEDANCE REPORT - KILN 2
04/09/13 - 06/04/13

Start Date	Start Time	End Date	End Time	Downtime	#	Event	Cause	Parameter	Limit	Corrective Action
4/10/2013	22:47:15	4/10/2013	23:47:51	1:00:36	67	Malfunction	The LGF Pump Started to Surge Which Caused the Flame to Pulse, Triggering the CO's to Rise	Carbon Monoxide	Opl	Adjusted the LGF Pump Pressure to Stabilize
5/5/2013	16:10:38	5/5/2013	16:11:04	0:00:26	68	Malfunction	After Bringing the Kiln Back Up From Scrubber Maintenance, Loose Soda Ash Solids From the Scrubber Cleaning Plugged the Scrubber Filter Baskets Which Caused the Instantaneous Upper Instrument Setpoint to be Reached for Scrubber Recirc. Rate Span	Scrubber Recirc. Rate	Span	Cleaned the Scrubber Filter Baskets and Adjusted the Scrubber Recirc. Rate
5/6/2013	10:21:51	5/6/2013	10:30:56	0:09:05	69	Malfunction	The End of the Burn Tank Was Reached Which Caused an LGF Surge, Triggering the Instantaneous Upper Instrument Setpoint To Be Reached for LGF Flow Span	LGF Flow	Span	Adjusted Fuel Flow
5/6/2013	18:02:48	5/6/2013	18:03:13	0:00:25	70	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Scrubber Recirc. Rate Span Due to a Fault Signal Being Sent From the Flow Meter	Scrubber Recirc. Rate	Span	I & E Inspected the Flow Meter and the Kiln Operator Adjusted the Flow Rate
5/8/2013	13:32:54	5/8/2013	14:01:02	0:28:08	71	Malfunction	Soda Ash Solids Plugged the Recirc. Pump From An Earlier Attempt to Lower the Scrubber D.P. By Flushing the System	Scrubber Recirc. Rate	Span	The Soda Ash Solids Were Removed From the Pump and the Filter Basket Was Cleaned
5/8/2013	21:30:05	5/8/2013	21:32:14	0:02:09	72	Malfunction	The Flow Meter Faulted Due to a Soda Ash Build Up Around the Instrument Monitors Which Caused the Instantaneous Upper Instrument Setpoint To Be Reached For Scrubber Recirc. Rate Span	Scrubber Recirc. Rate	Span	The Instrument Monitors Were Cleaned By I & E So a Sufficient Signal Could Be Obtained
5/10/2013	10:08:30	5/10/2013	14:56:30	4:48:00	73	Malfunction	After I & E Investigated Consistent and Erroneous High Stack Gas Readings, It Was Determined the Stack Gas Probe Was Damaged	Stack Gas Flow Rate	Span	I & E Changed Stack Gas Probe
5/23/2013	12:39:04	5/23/2013	12:40:12	0:01:08	74	Malfunction	Instantaneous Upper Instrument Setpoint Reached for LGF Flow Span	LGF Flow	Span	Adjusted Fuel Flow
5/24/2013	5:08:09	5/24/2013	5:08:50	0:00:41	75	Malfunction	After A Tank Switch , the LGF Pump Started to Pulse Which Caused Pressure Changes At the Burner Nozzle. The Pressure Changes Amplified Down the Kiln and Triggered the Rear Chamber System	Back Chamber Pressure, 1 Second Delay		The LGF Pump Was Adjusted To Stop the Pressure Pulses and the Primary Air Fan Was Adjusted To Increase The Rear Chamber System Efficiency
5/26/2013	22:41:34	5/26/2013	22:45:03	0:03:29	76	Malfunction	Instantaneous Upper Instrument Setpoint Was Reached for LGF Flow Span Due to the LGF Pump Stopping Which Caused A Sudden Surge In the Fuel Delivery System	LGF Flow	Span	The Trunnion Mechanic Restarted the Pump And Adjusted the Pump Pressure
5/31/2013	15:08:50	5/31/2013	16:20:27	1:11:37	77	Malfunction	The Main Air Compressor Failed Which Caused A Significant Change in the Flame Which Caused the CO's to Rise	Carbon Monoxide	Opl	A Portable Compressor Was Attached to the Burner Nozzle While the Main Compressor Was Inspected

NORLITE, LLC
MACT EXCEEDANCE REPORT - KILN 2
04/09/13 - 06/04/13

Start Date	Start Time	End Date	End Time	Downtime	#	Event	Cause	Parameter	Limit	Corrective Action
6/1/2013	7:06:20	6/1/2013	7:10:28	0:04:08	78	Malfunction	The Kiln Operator was Controlling LGF Fuel Flow With Valves and High LGF Line Pressure Which Caused a Fuel Flow Surge. This Triggered a Pressure Pulse in the Kiln that Affected the Rear Chamber System / No Visible Emissions	Back Chamber Pressure, 1 Second Delay	Opl	Adjusted LGF Line Pressure and LGF Flow